



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

G. George Reeves

Serial No.: 09/739,503

Filed: December 19, 2000

For: **GOLF ROUND DATA SYSTEM WITH
CELLULAR TELEPHONE AND
PLAYER HELP FEATURES**

Attorney Docket No. P-2986.003

Pending

Raleigh, North Carolina
March 19, 2001

Honorable Commissioner of Patents
and Trademarks
Washington, D.C. 20231

Sir:

PRELIMINARY AMENDMENT

In the Claims

Please amend claims 7, 8, 10, 11, 16, 18, 24, 25, 26, 28, 31, 32, 33, 34, 39, 41, 42, 45, 46, 47, 50, 51, 62, 63, 64, 66, 67, 68, 69, 70, 71, 72, 73, and 74-80 as follows:

7. (Amended) The portable golf round data system of Claim 1 wherein said selected portion includes the green of the hole being played and the part of the course between the user's present position and that green.

8. (Amended) The portable golf round data system of Claim 1 wherein said graphic display is adapted to show the direction in which the user intends the ball to travel due to the next stroke.

10. (Amended) The portable golf round data system of Claim 9 wherein said predetermined skill level is based upon the user's past performance skill level.

11. (Amended) The portable golf round data system of Claim 1 wherein said graphic display is adapted to show a user's position on a green, the cup in said green, and a representation of forces on a ball on said green along a line between said user position and said cup.

16. (Amended) The portable golf round data system of Claim 14 wherein said graphic display is adapted to show the number of strokes a user has used on the current hole being played.

18. (Amended) The portable golf round data system of Claim 15 wherein said graphic display is adapted to show the location of at least one selected previous stroke in said stroke data storage and the resulting ball position after said stroke.

24. (Amended) The portable golf round data system of Claim 15 wherein said location data is transferred from said portable data collection unit to a data processor external to said portable data collection unit.

25. (Amended) The portable golf round data system of Claim 15 wherein said location data is transferred from said portable data collection unit to a data file accessible via the Internet.

26. (Amended) The portable golf round data system of Claim 15 wherein said location data is transferred from the said portable data collection unit via a wireless communication link.

28. (Amended) The portable golf round data system of Claim 9 wherein said graphic display is adapted to indicate the region on the course within which the ball will probably rest following the user's next stroke taking into consideration the club selected by the user and a predetermined skill level.

31. (Amended) The portable golf round data system of Claim 1 wherein said graphic display is adapted to show a user information on the break of a putt from a straight line extending from said user's position on a green to the cup in said green.

32. (Amended) A cellular radiotelephone comprising:
- a) a cellular radio transceiver to communicate with a cellular network;
 - (b) a radiolocation receiver for receiving at least one external locating signal from which the user's current location on a golf course can be determined;
 - (c) data storage for storing data relating to the location of golf course features;
 - (d) at least one data processor acting upon data from the radiolocation receiver and the data storage for determining a player's current location on said course from said external locating signal and for calculating distances between said current location and at least one of said golf course features retained in said data storage; and
 - (e) a display on said cellular radiotelephone connected to said processor and operative to display information about the distance between said current location and at least one selected golf course feature.
33. (Amended) The cellular radiotelephone of Claim 32 wherein said display is adapted to show the club the user intends to use for the next stroke.
34. (Amended) The cellular radiotelephone of Claim 32 wherein said portable unit includes a data storage containing data relating to the user's past performance skill level.
39. (Amended) The cellular radiotelephone of Claim 32 wherein said display is adapted to show the number of strokes a user has used on the current hole being played.
41. (Amended) The cellular radiotelephone of Claim 37 wherein said stroke register includes a microprocessor adapted for voice recognition of at least one selected word.
42. (Amended) The cellular radiotelephone of Claim 37 wherein said stroke register includes a microprocessor adapted to receive and recognize telemetry signals emitted by telemetry equipped golf clubs.
45. (Amended) The cellular radiotelephone of Claim 38 wherein said stroke data is transferred from the said cellular radiotelephone via a cellular telephone data channel.

46. (Amended) The cellular radiotelephone of Claim 38 wherein said stroke data is transferred from said cellular radiotelephone unit to a data processor external to said cellular radiotelephone.

47. (Amended) The cellular radiotelephone of Claim 38 wherein said stroke data is transferred from said cellular radiotelephone to a data file accessible via the Internet.

50. (Amended) The cellular radiotelephone of Claim 32 wherein said display is adapted to show a user the probable distance a ball will travel when struck by a selected club.

51. (Amended) The cellular radiotelephone of Claim 32 wherein said display is adapted to show a user information relating to the break of a putt from a straight line extending from said user's position on a green to the cup in said green.

62. (Amended) A golf user aid method comprising:
(a) storing information relating to the likely travel of a ball resulting from a stroke using at least one selected club;
(b) determining the user's location on a golf course; and
(c) indicating to the user information relating to the likely path of the ball due to the next stroke using the selected club.

63. (Amended) The golf round data method of Claim 62 wherein said information to the user includes the likely distance to be achieved by a stroke which is not a putt.

64. (Amended) The golf round data method of Claim 62 wherein said information to the user includes the likely break of a putt away from a straight line from the user's present position on a green and the cup in said green.

66. (Amended) The golf data display of Claim 65 wherein said data display is portable to be carried by the user.

67. (Amended) The golf data display of Claim 65 wherein said locator is a radiolocation receiver adapted to receive at least one external locating signal from which the user's current location on a golf course can be determined.

68. (Amended) The golf data display of Claim 65 wherein said selected club is determined using one or more key switches and an indicator showing said user the particular club selected.

69. (Amended) The golf data display of Claim 65 wherein said selected club is determined using a telemetry receiver adapted to recognize which specific club a user is manipulating in some predetermined manner.

70. (Amended) The golf data display of Claim 65 wherein said likely path of the ball is determined from the past performance of said user.

71. (Amended) The golf data display of Claim 65 wherein said indicator is a graphical display adapted to show at least one course feature and an indicated course region within which the user's ball will be expected to lie following a stroke with said selected club.

72. (Amended) The golf data display of Claim 71 wherein said graphical display is further adapted to allow the user to indicate the intended direction of said next stroke.

73. (Amended) A golf putting aid comprising:

- (a) a locator which determines the user's current location on a golf course;
- (b) data storage retaining information from which the break of a putted ball from a straight line from the current lie on a green to the cup of that green can be estimated; and
- (c) at least one indicator conveying to the user expected approximate break distance and direction of a putted ball from a straight line between said user's current location and said cup.

74. (Amended) The golf putting aid of Claim 73 wherein said locator is a radiolocation receiver adapted to receive at least one external locating signal from which the user's current location on a golf course can be determined.

75. (Amended) The golf putting aid of Claim 73 wherein said information retained in data storage includes a number of break distances and directions determined from a series of test putts to the current cup location from multiple sample locations on the green.

76. (Amended) The golf putting aid of Claim 73 wherein said information retained in data storage includes green elevation contours and the current cup location.

77. (Amended) The golf putting aid of Claim 73 wherein said indicator includes an alpha numeric display of estimated break distance and direction.

78. (Amended) The golf putting aid of Claim 73 wherein said indicator includes graphical display of green elevation contours to be traversed from the current ball position on the green to the cup.

79. (Amended) The golf putting aid of Claim 73 wherein said indicator includes a graphical display of forces to be exerted on said putt ball by green contours.

80. (Amended) The golf putting aid of Claim 73 wherein said indicator includes an audible voice.

Please add claims 81 - 84 as follows:

81. The cellular radiotelephone of Claim 32 wherein said data processor is external to said cellular radiotelephone and said data processor is operatively connected to said cellular radiotelephone through wireless data transfer.

82. The cellular radiotelephone of Claim 32 wherein at least a portion of said data storage is external to said cellular radiotelephone.

83. The cellular radiotelephone of Claim 32 wherein said display is a proportional graphical map.

84. The cellular radiotelephone of Claim 32 wherein said display is an alpha numeric display.

REMARKS

Claims 7, 8, 10, 11, 16, 18, 24, 25, 26, 28, 31, 32, 33, 34, 39, 41, 42, 45, 46, 47, 50, 51, 62, 63, 64, 66, 67, 68, 69, 70, 71, 72, 73, and 74-80 have been amended to correct the dependencies of the claims and to make the claim language more consistent.

Claims 81-84 have been added.

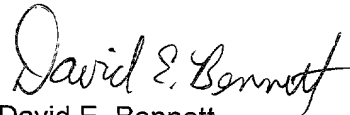
A check in the amount of \$36 is enclosed to cover the fee for four extra claims. If additional fees are required, please charge them to Deposit Account No. 18-1167.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

Respectfully submitted,

COATS & BENNETT, P.L.L.C.

By:



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CERTIFICATE OF MAILING

I HEREBY CERTIFY THAT THIS DOCUMENT IS BEING DEPOSITED WITH THE UNITED STATE POSTAL SERVICE AS FIRST CLASS MAIL, POSTAGE PREPAID, IN AN ENVELOPE ADDRESSED TO: **HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS, WASHINGTON, D.C. 20231**

Signature: David E. Bennett

Date: 3-19-01

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claims 7, 8, 10, 11, 16, 18, 24, 25, 26, 28, 31, 32, 33, 34, 39, 41, 42, 45, 46, 47, 50, 51, 62, 63, 64, 66, 67, 68, 69, 70, 71, 72, 73, and 74-80 have been amended as follows:

7. (Amended) The portable golf round data system of Claim 1 wherein said selected portion includes the green of the hole being played and the part of the course between the [player's] user's present position and that green.
8. (Amended) The portable golf round data system of Claim 1 wherein said graphic display is adapted to show the direction in which the [player] user intends the ball to travel due to the next stroke.
10. (Amended) The portable golf round data system of Claim 9 wherein said predetermined skill level is based upon the [player's] user's past performance skill level.
11. (Amended) The portable golf round data system of Claim 1 wherein said graphic display is adapted to show a [player's] user's position on a green, the cup in said green, and a representation of forces on a ball on said green along a line between said [player] user position and said cup.
16. (Amended) The portable golf round data system of Claim 14 wherein said graphic display is adapted to show the number of strokes a [player] user has used on the current hole being played.
18. (Amended) The portable golf round data system of Claim [1] 15 wherein said graphic display is adapted to show the location of at least one selected previous stroke in said stroke data storage and the resulting ball position after said stroke.

24. (Amended) The portable golf round data system of Claim [14] 15 wherein said [stroke] location data is transferred from said portable data collection unit to a data processor external to said portable data collection unit.

25. (Amended) The portable golf round data system of Claim [14] 15 wherein said [stroke] location data is transferred from said portable data collection unit to a data file accessible via the Internet.

26. (Amended) The portable golf round data system of Claim [14] 15 wherein said [stroke] location data is transferred from the said portable data collection unit via a wireless communication link.

28. (Amended) The portable golf round data system of Claim 9 wherein said graphic display is adapted to [show] indicate the region on the course within which the ball will probably rest following the [player's] user's next stroke taking into consideration the club selected by the [player] user and a predetermined skill level.

31. (Amended) The portable golf round data system of Claim 1 wherein said graphic display is adapted to show a [player] user information on the break of a putt from a straight line extending from said [player's] user's position on a green to the cup in said green.

32. (Amended) A cellular radiotelephone comprising:

- a) a cellular radio transceiver to communicate with a cellular network;
- (b) a radiolocation receiver for receiving at least one external locating signal from which the user's current location on a golf course can be determined;
- (c) data storage [in said cellular radiotelephone] for storing data relating to the location of golf course features;
- (d) at least one [microprocessor in said cellular radiotelephone operatively connected to the receiver and to] data processor acting upon data from the radiolocation receiver and the data storage for determining a player's current location on said course from said external locating signal and for calculating distances between said current location and at least one of said golf course features retained in said data storage; and

(e) a display on said cellular radiotelephone connected to said processor and operative to display information about the distance between said current location and at least one selected golf course feature.

33. (Amended) The cellular radiotelephone of Claim 32 wherein said display is adapted to show the club the [player] user intends to use for the next stroke.

34. (Amended) The cellular radiotelephone of Claim 32 wherein said portable unit includes a data storage containing data relating to the [player's] user's past performance skill level.

39. (Amended) The cellular radiotelephone of Claim 32 wherein said display is adapted to show the number of strokes a [player] user has used on the current hole being played.

41. (Amended) The cellular radiotelephone of Claim 37 wherein said stroke register includes [said] a microprocessor adapted for voice recognition of at least one selected word.

42. (Amended) The cellular radiotelephone of Claim 37 wherein said stroke register includes [said] a microprocessor adapted to receive and recognize telemetry signals emitted by telemetry equipped golf clubs.

45. (Amended) The cellular radiotelephone of Claim [37] 38 wherein said stroke data is transferred from the said cellular radiotelephone via a cellular telephone data channel.

46. (Amended) The cellular radiotelephone of Claim [37] 38 wherein said stroke data is transferred from said [portable data collection] cellular radiotelephone unit to a data processor external to said cellular radiotelephone.

47. (Amended) The cellular radiotelephone of Claim [37] 38 wherein said stroke data is transferred from said cellular radiotelephone to a data file accessible via the Internet.

50. (Amended) The cellular radiotelephone of Claim 32 wherein said display is adapted to show a [player] user the probable distance a ball will travel when struck by a selected club.

51. (Amended) The cellular radiotelephone of Claim 32 wherein said display is adapted to show a [player] user information relating to the break of a putt from a straight line extending from said [player's] user's position on a green to the cup in said green.

62. (Amended) A golf [player] user aid method comprising:
(a) storing information relating to the likely travel of a ball resulting from a stroke using at least one selected club;
(b) determining the [player's] user's location on a golf course; and
(c) indicating to the [player] user information relating to the likely path of the ball due to the next stroke using the selected club.

63. (Amended) The golf round data method of Claim 62 wherein said information to the [player] user includes the likely distance to be achieved by a stroke which is not a putt.

64. (Amended) The golf round data method of Claim 62 wherein said information to the [player] user includes the likely break of a putt away from a straight line from the [player's] user's present position on a green and the cup in said green.

66. (Amended) The golf data display of [claim] Claim 65 wherein said data display is portable to be carried by the user.

67. (Amended) The golf data display of [claim] Claim 65 wherein said locator is a radiolocation receiver adapted to receive at least one external locating signal from which the user's current location on a golf course can be determined.

68. (Amended) The golf data display of [claim] Claim 65 wherein said selected club [identification includes] is determined using one or more key switches and an indicator showing said [player] user the particular club [he has] selected.

69. (Amended) The golf data display of [claim] Claim 65 wherein said [club identification is] selected club is determined using a telemetry receiver adapted to recognize which specific club a [player] user is manipulating in some predetermined manner.

70. (Amended) The golf data display of [claim] Claim 65 wherein said likely path of the ball [travel distance] is determined from the past performance of said [player] user.

71. (Amended) The golf data display of [claim] Claim 65 wherein said indicator is a graphical display adapted to show at least one course feature and [a] an indicated course region within which [a predetermined fraction of said player's shots would] the user's ball will be expected to lie following a stroke [taken] with said [intended next] selected club.

72. (Amended) The golf data display of [claim] Claim 71 wherein said graphical display is further adapted to allow the user to indicate the intended direction of said next stroke.

73. (Amended) A golf putting aid comprising:

- (a) a locator which determines the user's current location on a golf course;
- (b) data storage retaining information from which the break of a putt from a straight line from the current lie on a green to the cup of that green can be estimated; and
- (c) at least one indicator conveying to the [player] user expected approximate break distance and direction of a putt from a straight line between said [player's] user's current location and said cup.

74. (Amended) The golf putting aid of [claim] Claim 73 wherein said locator is a radiolocation receiver adapted to receive at least one external locating signal from which the user's current location on a golf course can be determined.

75. (Amended) The golf putting aid of [claim] Claim 73 wherein said information retained in data storage includes a number of break distances and directions determined from a series of test putts to the current cup location from multiple sample locations on the green.

76. (Amended) The golf putting aid of [claim] Claim 73 wherein said information retained in data storage includes green elevation contours and the current cup location.

77. (Amended) The golf putting aid of [claim] Claim 73 wherein said indicator includes an alpha numeric display of estimated break distance and direction.

78. (Amended) The golf putting aid of [claim] Claim 73 wherein said indicator includes graphical display of green elevation contours to be traversed from the current ball position on the green to the cup.

79. (Amended) The golf putting aid of [claim] Claim 73 wherein said indicator includes a graphical display of forces to be exerted on said putted ball by green contours.

80. (Amended) The golf putting aid of [claim] Claim 73 wherein said indicator includes an audible voice.

Claims 81 - 84 have been added.